

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear how a bridge along with the second sleeve part can be removed, with the first sleeve part remained in the implant since the outer surface of the first sleeve part expanded against the second sleeve part. Does the removal of bridge along with the second sleeve part require removal of the screw?

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1- 15, 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jorneus (5,145,371) in view of Kownacki et al. (5,302,125).

Jorneus discloses coupling a first sleeve part 14 of a spacer member to the implant 2; guiding an inner surface of a first portion of second sleeve-shaped part 4 against an outer surface of the first sleeve-part (fig. 1). The first and second sleeve-

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shaped parts are secured using a screw. Jorneus further discloses attaching the bridge to the second sleeve part (col. 2, lines 60-64). Jorneus does not explicitly show the removal of the bridge and the second sleeve part. However, it is clear from the drawing that one having ordinary skill in the art can remove the bridge and the second sleeve.

Jorneus fails to show that rotating the screw to expand at least portion of the first sleeve part such that the outer surface of the first sleeve part expands against the second sleeve.

Kownacki teaches dental implant having an abutment 20 (e.g. sleeve-shaped part, figure 9) having plurality of longitudinal slots (e.g. flexible fingers 40, fig. 9) for facilitating expansion of the abutment. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Jorneus by providing an expanding ring as taught by Kownacki in order to effectively secure the dental implant system assembly.

Regarding claim 7, Jorneus shows the second sleeve part has narrow part (e.g. upper part of the second sleeve) and wider part (e.g. lower part that engages with first sleeve part). Regarding claim 8, the second sleeve part having first and second portions (e.g. upper and lower) which merge on the outside via an inclined surface (shown in figure 1)

Regarding claim 12, Jorneus/Kownacki fails to teach specific width( a result effective variable) of the 2<sup>nd</sup> sleeve-shaped part. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have specific width since it has been held that discovering the optimum value of a result effective variable

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involves only routing skills in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Claims 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jorneus in view of Kownacki et al. as applied to claim 2 above, and further in view of Lazzara et al. (5,022,860).

Jorneus/Kownacki discloses the invention substantially as claimed except for the first sleeve-shaped part having a cone shaped surface to match with cone shaped surface of the screw.

Lazzara teaches cone shaped screw head 62 and cone shaped surface for the receiving sleeve 52 (fig. 4). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Jorneus/Kownacki by providing cone shaped surface as taught by Lazzara in order to prevent screw from further threading into the implant as an alternative solution.

### ***Response to Arguments***

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOGESH PATEL whose telephone number is (571)270-3646. The examiner can normally be reached on 8:00 to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cris Rodriguez can be reached on 571-272-4964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/YOGESH PATEL/  
Examiner, Art Unit 3732

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